

## **ABSTRACT**

A low noise amplifier (LNA) for filtering an input signal to generate an output signal. The low noise amplifier includes a switched loading circuit having a plurality of loading units, each of the loading units determining a corresponding center frequency of the low noise amplifier. The switched loading circuit selectively enables a loading unit having the desired corresponding center frequency. At least one converters coupled to the switched loading circuit converts a voltage of the input signal into a loading current and passes the loading current through the enabled loading unit to generate the output signal.